

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

*(use as many sheets as necessary)*

Sheet	1	of	2
-------	---	----	---

### Complete if Known

Application Number	10/044,716
Filing Date	January 11, 2002
First Named Inventor	John Langenfeld
Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	270/070

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Use as many sheets as necessary)

Sheet 2 of 2

of 2

### Complete if Known

Application Number	10/044,716
Filing Date	January 11, 2002
First Named Inventor	John Langenfeld
Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	270/070

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
sh	AH	HATAKEYAMA, S. et al., "Expression of Bone Morphogenetic Proteins of Human Neoplastic Epithelial Cells", Biochem. Mol. Biol. Int., 1997, pp. 497, Vol. 497	
	AI	KLEEFF, Jorg et al., Bone Morphogenetic Protein 2 Exerts Diverse Effects on Cell Growth In Vitro and Is Expressed in Human Pancreatic Cancer In Vivo, Gastroenterology, May 1999, pp. 1202-1216, Vol. 116, No. 5, University of California, Irvine, California	
	AJ	GUO, W. et al., "Expression of Bone Morphogenetic Proteins and Receptors In Sarcomas", Clin. Orthop., 1999, pp. 175-83, Vol. 365	

RECEIVED

JUN 28 2002

TECH CENTER 1600/2900

Examiner  
Signature

*[Signature]*

Date  
Considered

4/7/05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

FORM PTO-1449

ATTY. DOC. NO.

272/0700S

SERIAL NO.

10/044,716

LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S  
INFORMATION DISCLOSURE STATEMENT

APPLICANT:

Langenfeld, John

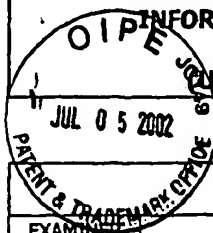
FILING DATE:

01/11/02

GROUP:

1645

(Use several sheets if necessary)



## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

RECEIVED

JUL 11 2002

TECH CENTER 1600/2900

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES NO
	AI						
	AJ						
	AK						

## NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

SK	AL	Abe et al., "Essential Requirement of BMPs-2/4 for Both Osteoblast and Osteoclast Formation in Murine Bone Marrow Cultures from Adult Mice: Antagonism by Noggin," J. of Bone and Mineral Res., Vol. 15, No. 4, (2000) pp. 663-673
	AM	An et al., "Recombinant Human Bone Morphogenetic Protein-2 Induces a Hematopoietic Microenvironment in the Rat that Supports the Growth of Stem Cells," Experimental Hematology. Vol. 24, (1996) pp. 768-775
	AN	Celeste et al., "Identification of Transforming Growth Factor $\beta$ Family Members Present in Bone-Inductive Protein Purified From Bovine Bone," Proc. Natl. Acad. Sci. USA, Vol. 87, (1990), pp. 9843-9847
7	AO	Cui et al., "BMP-4 is Proteolytically Activated by Furin and/or PC6 During Vertebrate Embryonic Development," The EMBO Journal. Vol. 17, No. 16, (1998), pp.4735-4743

EXAMINER:

Not Yet Assigned

DATE CONSIDERED:

4/7/08

EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant

<b>FORM PTO-1449</b>	<b>ATTY. DOC. NO.</b> 272/070US	<b>SERIAL NO.</b> 10/044,716
<b>LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>	<b>APPLICANT:</b> Langenfeld, John	<b>RECEIVED</b>
(Use several sheets if necessary)	<b>FILING DATE:</b> 01/11/02	<b>GROUP:</b> 1645

52	AP	Cunningham et al., "Osteogenin and Recombinant Bone Morphogenetic Protein 2B are Chemotactic for Monocytes and Stimulate Transforming Growth Factor $\beta$ 1 mRNA Expression," Proc. Natl. Acad. Sci. USA, Vol. 89, (1992), pp. 11740-11744
	AQ	Erickson et al., "Recombinant Bone Morphogenetic Protein (BMP)-2 Regulates Costochondral Growth Plate Chondrocytes and Induces Expression of BMP-2 and BMP-4 in a Cell Maturation-Dependent Manner," J. of Orthopaedic Research, Vol. 15, (1997) pp. 371-380
	AR	Liu et al., "Human Type II Receptor for Bone Morphogenic Proteins (BMPs): Extension of the Two-Kinase Receptor Model to the BMPs," Molecular and Cellular Biology, Vol. 15, No. 7, (1995), pp. 3479-3486
	AS	Sakou et al., "Localization of Smads, the TGF- $\beta$ Family Intracellular Signaling Components During Endochondral Ossification," J. of Bone and Mineral Res., Vol. 14, No. 7, (1999), pp. 1145-1152
	AT	ten Dijke et al., "Identification of Type I Receptors for Osteogenic Protein-1 and Bone Morphogenetic Protein-4," J. of Bio. Chem., Vol. 269, No. 25, (1994), pp. 16985-16988
	AU	Vainio et al., "Identification of BMP-4 as a Signal Mediating Secondary Induction Between Epithelial and Mesenchymal Tissues During Early Tooth Development," Cell, Vol. 75, 1993, pp. 45-48
	AV	Warburton et al., "The Molecular Basis of Lung Morphogenesis," Mechanism of Development, Vol. 92, (2000), pp. 55-81
	AW	Weaver et al., "BMP Signaling Regulates Proximal-Distal Differentiation of Endotherm in Mouse Lung Development," Development, Vol. 126 (1999), pp. 4005-4015
	AX	Willette et al., "BMP-2 Gene Expression and Effects on Human Vascular Smooth Muscle Cells," J. of Vascular Research, Vol. 36, (1999), pp. 120-125
	AY	Wozney et al., "Novel Regulators of Bone Formation: Molecular Clones and Activities," Science, Vol. 242, (1988), pp. 1528-1534

<b>EXAMINER:</b> Not Yet Assigned	<b>DATE CONSIDERED:</b> 7/7/05
EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant	

<b>FORM PTO-1449</b> <b>LIST OF PATENTS AND OTHER ITEMS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b> AUG 12 2002 (Use several sheets if necessary)	<b>ATTY. DOCKET NO.</b> 272/070US	<b>SERIAL NO.</b> 10/044,716
	<b>APPLICANT:</b> Langenfeld, John	
	<b>FILING DATE:</b> January 11, 2002	<b>GROUP:</b> 1645

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						

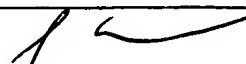
COPY OF PAPERS  
ORIGINALLY FILED

**RECEIVED**  
 AUG 14 2002  
 TECH CENTER 1600/2900

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES NO
	AI						
	AJ						
	AK						

NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)		
SK	AL	Ikeda et al., "Cloning of Rat Type I Receptor cDNA for Bone Morphogenetic Protein-2 and Bone Morphogenetic Protein-4, and the Localization Compared With That of the Ligands," Developmental Dynamics, Vol. 206, (1996) pp. 318-329
SR	AM	ten Dijke et al., "Activin receptor-like kinases: a novel subclass of cell-surface receptors with predicted serine/threonine kinase activity," Oncogene, Vol. 8, (1993) pp. 2879-1887
	AN	
	AO	

LA-242662.1

<b>EXAMINER:</b> 	<b>DATE CONSIDERED:</b> 4/7/05
EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant	